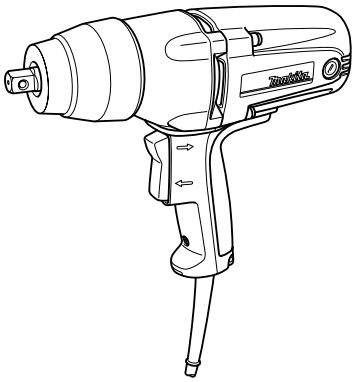
Impact Wrench

MODEL TW0350



004004

DOUBLE INSULATION

I N S T R U C T I O N M A N U A L

⚠ **WARNING:**
For your personal safety, READ and UNDERSTAND before using.
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

www.makitatools.com

SPECIFICATIONS

Model		TW0350
Capacities	Standard bolt	M12 - M22 (1/2”-7/8”)
	High tensile bolt	M12 - M16 (1/2”-5/8”)
Square drive		12.7 mm (1/2”)
No load speed (RPM)		2,000
Impacts per minute		2,000
Max. fastening torque		350 N.m (258 ft.lbs)
Overall length		283 mm (11-1/8”)
Net weight		2.9 kg (6.4 lbs)

- Manufacturer reserves the right to change specifications without notice.
- Specifications may differ from country to country.

GENERAL SAFETY RULES

USA002-2

(For All Tools)

⚠ **WARNING:**
Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

4. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation ⧈ eliminates the need for the three wire grounded power cord and grounded power supply system.

5. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.

6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

7. **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.

8. **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These cords are rated for outdoor use and reduce the risk of electric shock.

Personal Safety

9. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.

10. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.

11. **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

12. **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

13. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.

14. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Ordinary eye or sun glasses are NOT eye protection.

Tool Use and Care

15. **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.

16. **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

17. **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.

18. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.

19. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

20. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.

21. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.

22. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become hazardous when used on another tool.

SERVICE

23. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.

24. **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of electric shock or injury.

USE PROPER EXTENSION CORD: Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Table 1: Minimum gage for cord

Ampere Rating		Volts	Total length of cord in feet			
		120 V	25 ft.	50 ft.	100 ft.	150 ft.
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

SPECIFIC SAFETY RULES

USB003-2

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to impact wrench safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

1. **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a “live” wire will make exposed metal parts of tool “live” and shock the operator.

2. **Wear ear protectors.**

3. **Check the socket carefully for wear, cracks or damage before installation.**

4. **Hold the tool firmly.**

5. **Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.**

6. **The proper fastening torque may differ depending upon the kind or size of the bolt. Check the torque with a torque wrench.**

SAVE THESE INSTRUCTIONS

⚠ WARNING:
MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

SYMBOLS

USD202-2

The followings show the symbols used for tool.

V ..... volts

A ..... amperes

Hz ..... hertz

~ ..... alternating current

n_o ..... no load speed

⧈ ..... Class II Construction

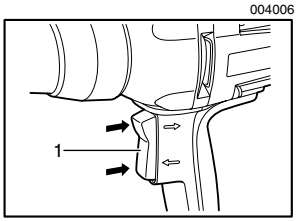
.../min ..... revolutions or reciprocation per minute

..... number of blow

FUNCTIONAL DESCRIPTION

⚠ **CAUTION:**

- Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.



1. Switch trigger

Switch action

⚠ **CAUTION:**

- Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the “OFF” position when released.
- Change the direction of rotation only when the tool comes to a complete stop. Changing it before the tool stops may damage the tool.

The switch is reversible, providing either clockwise or counterclockwise rotation. To start the tool, simply pull the lower part of the switch trigger for clockwise or the upper part for counterclockwise. Release the switch trigger to stop.

ASSEMBLY

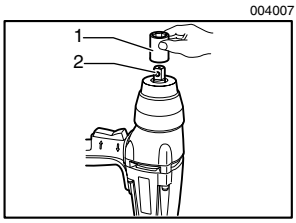
⚠ **CAUTION:**

- Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

Selecting correct socket

Always use the correct size socket for bolts and nuts. An incorrect size socket will result in inaccurate and inconsistent fastening torque and/or damage to the bolt or nut.

Installing or removing socket



1. Socket
2. Anvil

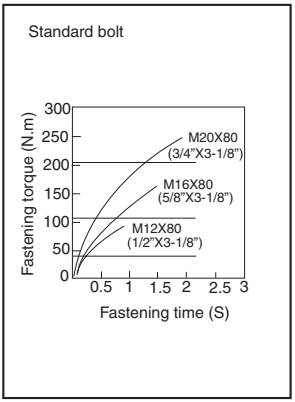
⚠ **CAUTION:**

- Always be sure that the tool is switched off and unplugged before installing or removing the socket.

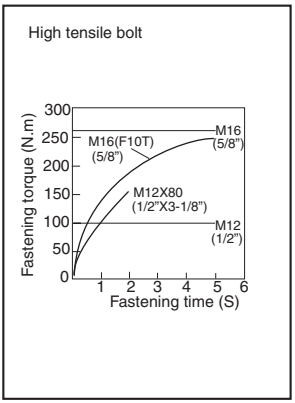
Align the hole in the side of the socket with the detent pin on the anvil and push it onto the anvil of the tool until it locks into place. Tap it lightly if required.
To remove the socket, simply pull it off.

OPERATION

004009



004010



The proper fastening torque may differ depending upon the kind or size of the bolt, the material of the workpiece to be fastened, etc. The relation between fastening torque and fastening time is shown in the figures.

Hold the tool firmly and place the socket over the bolt or nut. Turn the tool on and fasten for the proper fastening time.

NOTE:

- When fastening screw M12 (1/2") or smaller, carefully adjust pressure on the switch so that the screw is not damaged.
- Hold the tool pointed straight at the bolt or nut without applying excessive pressure on the tool.
- If you fasten the bolt for a time longer than shown in the figures, the bolt or the socket may be overstressed, damaged, etc. Before starting your job, always perform a test operation to determine the proper fastening time for your bolt. Especially for the bolt over than M12 (1/2"), perform the above test operation to prevent the trouble on socket or bolt, etc.

The fastening torque is affected by a wide variety of factors including the following. After fastening, always check the torque with a torque wrench.

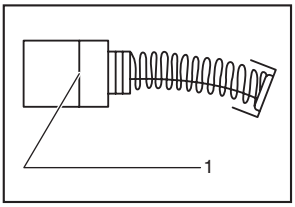
1. Voltage
   - Voltage drop will cause a reduction in the fastening torque.
2. Socket
   - Failure to use the correct size socket will cause a reduction in the fastening torque.
   - A worn socket (wear on the hex end or square end) will cause a reduction in the fastening torque.
3. Bolt
   - Even though the torque coefficient and the class of bolt are the same, the proper fastening torque will differ according to the diameter of bolt.
   - Even though the diameters of bolts are the same, the proper fastening torque will differ according to the torque coefficient, the class of bolt and the bolt length.

4. The use of the universal joint or the extension bar somewhat reduces the fastening force of the impact wrench. Compensate by fastening for a longer period of time.
5. The manner of holding the tool or the material of driving position to be fastened will affect the torque.

MAINTENANCE

⚠ **CAUTION:**

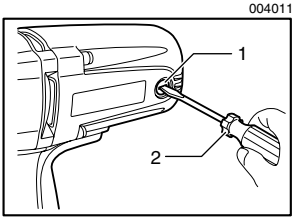
- Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.



1. Limit mark

Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.



1. Brush holder cap
2. Screwdriver

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

ACCESSORIES

⚠ **CAUTION:**

- These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita service center.

- Sockets
- Extension bar
- Universal joint

Cut

First-Class
Postage
Required

Post Office will
not deliver
without proper
postage.

Makita U.S.A., Inc.
14930 Northam Street
La Mirada, CA 90638-5753

Fold

MAIL THIS PORTION

Your answers to the following questions are appreciated.

1. This product was purchased from:

- ☐ Home Center
- ☐ Hardware/Lumber Store
- ☐ Tool Distributor
- ☐ Industrial Supply
- ☐ Construction Supply
- ☐ Other ( )

2. Use of the product is intended for:

- ☐ Construction Trade
- ☐ Industrial Maintenance
- ☐ Home Maintenance
- ☐ Hobby
- ☐ Other ( )

3. How did you learn about this product:

- ☐ Magazine
- ☐ From Dealer
- ☐ Newspaper
- ☐ Store Display
- ☐ Catalog
- ☐ Radio
- ☐ Exhibition
- ☐ From Friend
- ☐ Previous Usage
- ☐ Other ( )

4. Most favored points are:

- ☐ Design
- ☐ Features
- ☐ Size
- ☐ Price
- ☐ Makita Brand
- ☐ Repair Service
- ☐ Durability
- ☐ Power
- ☐ Other ( )

5. Any comments:

DATE PURCHASED
MONTH DAY YEAR

MODEL NO.

SERIAL NO.

INTL. LAST NAME / COMPANY NAME

STATUS Married Single

SEX M F

STREET ADRESS

CITY

STATE ZIP CODE PHONE AREA CODE

AGE: ☐ Under 19 ☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ 50-60 ☐ Over 60

BE SURE TO COMPLETE THE CUSTOMER'S PORTION OF THIS FORM AND RETAIN FOR YOUR RECORDS.

Please return this portion by facsimile or mail.

Facsimile No: (714) 522-8133

Paste

FACTORY SERVICE CENTERS

1-800-4-MAKITA

RETAIN THIS PORTION FOR YOUR RECORDS

ARIZONA
3707 E. Broadway Rd., Ste. 6
Phoenix, AZ 85040
(602) 437-2850

CALIFORNIA
41850 Christy St.
Fremont, CA 94538-5107
(510) 657-9881

14930 Northam St.
La Mirada, CA 90638-5753
(714) 522-8088

1970 Fulton Avenue
Sacramento, CA 95825
(916) 482-5197

7674 Clairemont Mesa Blvd.
San Diego, CA 92111
(858) 278-4471

16735 Saticoy St., Ste. 105
Van Nuys, CA 91406
(818) 782-2440

COLORADO
11839 E. 51st Ave.
Denver, CO 80239-2709
(303) 371-2850

FLORIDA
750 East Sample Road
Pompano Beach, FL 33064
(954) 781-6333

GEORGIA
4680 River Green Parkway NW
Duluth, GA 30096
(770) 476-8911

ILLINOIS
1450 Feehanville Dr.
Mt. Prospect, IL 60056-6011
(847) 297-3100

MARYLAND
7397 Washington Boulevard,
Suite 104 Elkridge, MD 21075
(410) 796-4401

MASSACHUSETTS
232 Providence Hwy.
Westwood, MA 02090
(781) 461-9754

MINNESOTA
6427 Penn Ave. South
Richfield, MN 55423
(612) 869-5199

MISSOURI
9876 Watson Road
St. Louis, MO 63126-2221
(314) 909-9889

NEBRASKA
4129 S. 84th St.
Omaha, NE 68127
(402) 597-2925

NEVADA
3375 S. Decatur Blvd.
Suites. 22 - 24
Las Vegas, NV 89102
(702) 368-4277

NEW JERSEY
251 Herrod Blvd.
Dayton, NJ 08810-1539
(609) 655-1212

NEW YORK
4917 Genessee Street
Cheektowaga, NY 14225
(716) 685-9503

OREGON
828 19th Avenue, N.W.
Portland, OR 97209
(503) 222-1823

PENNSYLVANIA
1704 Babcock Blvd.
Pittsburgh, PA 15209
(412) 822-7370

PUERTO RICO
200 Guayama St.
Hato Rey, PR 00917
(787) 250-8776

TENNESSEE
1120 Elm Hill P.
Suile 170 Nashville, TN 372
(615) 248-3321

TEXAS
12801 Stemmons Fwy Ste. 809
Farmers Branch, TX 75234
(972) 243-1150

12701 Directors Dr.
Stafford, TX 77477-3701
(281) 565-8665

3453 IH-35 North, Ste. 101
San Antonio, TX 78219
(210) 228-0676

WISCONSIN
Lincoln Plaza Shopping Ctr.
2245 S. 108th St. West Allis, WI 53227
(414) 541-4776

CUSTOMER'S RECORD

When you need service: Send complete tool (prepaid) to one of the Makita Factory Service Centers listed, or to an Authorized Makita Service Center. Be sure to attach a letter to the outside of the carton detailing the problem with your tool.	Date Purchased
	Dealer's Name & Address
	Model No.
	Serial No.

WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

MAKITA LIMITED ONE YEAR WARRANTY

Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others:
- repairs are required because of normal wear and tear:
- the tool has been abused, misused or improperly maintained:
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Makita Corporation
3-11-8, Sumiyoshi-cho,
Anjo, Aichi 446-8502 Japan

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